

CLAIMS:

What is claimed is:

1. A method in a logically partitioned data processing system including an operating system debugger and partition management firmware, said method comprising the steps of:

5 establishing extensions within said operating system debugger; and

10 utilizing said extensions to debug said partition management firmware.

2. The method according to claim 1, further comprising the step of establishing function calls within said

15 operating system debugger that when invoked by said operating system debugger cause said partition management firmware to execute partition management firmware operations.

20 3. The method according to claim 2, further comprising the steps of:

establishing an event handler routine within said operating system debugger;

invoking said event handler routine by said 25 operating system debugger; and

reporting, from said partition management firmware to said operating system debugger, partition management firmware events in response to said operating system debugger invoking said event handler routine.

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4. The method according to claim 2, further comprising the steps of:

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establishing a read memory call within said operating system debugger;

invoking said read memory function call by said operating system debugger; and

5 reading data from a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said read memory function call.

10 5. The method according to claim 2, further comprising the steps of:

establishing a write memory call within said operating system debugger;

invoking said write memory function call by said 15 operating system debugger; and

writing data to a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said write memory function call.

20 6. The method according to claim 1, further comprising the steps of:

determining whether debugging is enabled within said partition management firmware;

25 permitting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a determination that debugging is enabled within said partition management firmware; and

prohibiting said operating system debugger to 30 utilize said extensions to debug said partition

management firmware in response to a determination that debugging is disabled within said partition management firmware.

- 5 7. The method according to claim 6, further comprising the steps of:

including a service processor within said data processing system;

10 enabling debugging within said partition management firmware utilizing said service processor; and

disabling debugging within said partition management firmware utilizing said service processor.

8. The method according to claim 1, wherein said data

15 processing system includes hardware, wherein said operating system debugger exists within a partition, and further wherein said partition management firmware exists between said partition said hardware.

- 20 9. A computer program product in a logically partitioned data processing system including an operating system debugger and a partition management firmware, comprising:

25 instruction means for establishing extensions within said operating system debugger; and

instruction means for utilizing said extensions to debug said partition management firmware.

10. The product according to claim 9, further comprising
30 instruction means for establishing function calls within said operating system debugger that when invoked by said

operating system debugger cause said partition management firmware to execute partition management firmware operations.

- 5 11. The product according to claim 10, further comprising:
- instruction means for establishing an event handler routine within said operating system debugger;
- instruction means for invoking said event handler 10 routine by said operating system debugger; and
- instruction means for reporting, from said partition management firmware to said operating system debugger, partition management firmware events in response to said operating system debugger invoking said event handler 15 routine.
12. The product according to claim 10, further comprising:
- instruction means for establishing a read memory 20 call within said operating system debugger;
- instruction means for invoking said read memory function call by said operating system debugger; and
- instruction means for reading data from a physical memory location utilizing said partition management 25 firmware in response said operating system debugger invoking said read memory function call.
13. The product according to claim 10, further comprising:
- 30 instruction means for establishing a write memory call within said operating system debugger;

instruction means for invoking said write memory function call by said operating system debugger; and

instruction means for writing data to a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said write memory function call.

14. The product according to claim 9, further comprising:

10 instruction means for determining whether debugging is enabled within said partition management firmware;

instruction means for permitting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a

15 determination that debugging is enabled within said partition management firmware; and

instruction means for prohibiting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a

20 determination that debugging is disabled within said partition management firmware.

15. The product according to claim 14, further comprising:

25 instruction means for including a service processor within said data processing system;

instruction means for enabling debugging within said partition management firmware utilizing said service processor; and

30 instruction means for disabling debugging within said partition management firmware utilizing said service processor.

16. The product according to claim 9, wherein said data processing system includes hardware, wherein said operating system debugger exists within a partition, and
5 further wherein said partition management firmware exists between said partition said hardware.

17. A logically partitioned data processing system including an operating system debugger and a partition
10 management firmware comprising:

extensions included within said operating system debugger; and

said operating system debugger for utilizing said extensions to debug said partition management firmware.

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18. The system according to claim 17, further comprising function calls established within said operating system debugger that when invoked by said operating system debugger cause said partition management firmware to
20 execute partition management firmware operations.

19. The system according to claim 18, further comprising:

25 said operating system debugger including an event handler routine;

said operating system debugger for invoking said event handler routine; and

30 said partition management firmware for reporting to said operating system debugger partition management firmware events in response to said operating system debugger invoking said event handler routine.

20. The system according to claim 18, further comprising:

said operating system debugger including a read memory call;

5 said operating system debugger for invoking said read memory function; and

said partition management firmware for reading data from a physical memory location in response said operating system debugger invoking said read memory

10 function call.

21. The system according to claim 18, further comprising:

said operating system debugger including a write memory call;

said operating system debugger for invoking said write memory function; and

said partition management firmware for writing data to a physical memory location in response said operating

20 system debugger invoking said write memory function call.

22. The system according to claim 17, further comprising:

means for determining whether debugging is enabled

25 within said partition management firmware;

said operating system debugger being permitted to utilize said extensions to debug said partition management firmware in response to a determination that debugging is enabled within said partition management

30 firmware; and

said operating system debugger being prohibited from utilizing said extensions to debug said partition

management firmware in response to a determination that debugging is disabled within said partition management firmware.

- 5 23. The system according to claim 22, further comprising:

a service processor included within said data processing system; and

- 10 said service processor for enabling and disabling debugging within said partition management firmware.

24. The system according to claim 17, wherein said data processing system includes hardware, wherein said operating system debugger exists within a partition, and
15 further wherein said partition management firmware exists between said partition said hardware.